

IN THE CLAIMS:

1. (Currently Amended) A method of detecting the presence of ~~at least one~~ tumor marker mRNA in a sample comprising:

~~i) providing a sample of cells for analysis;~~

[[ii)] i) ~~incubating a cell treating the sample with~~ [[an]] ~~one or more~~ oligonucleotides that ~~targets~~ hybridize to the mRNA of one or more tumor marker markers [[mRNA]], wherein [[the]] each oligonucleotide comprises at least one linked energy donor moiety and at least one linked energy acceptor moiety, wherein said oligonucleotide forms a stem-loop hairpin and wherein said donor and acceptor moieties are separated by at least a portion of a ~~probing~~ nucleobase sequence that is complementary to a target sequence in said mRNA, and wherein each oligonucleotide hybridizes to the mRNA of a different tumor marker and emits a fluorescent signal after hybridization with the corresponding mRNA;

[[iii)] ii) detecting[[,.]] fluorescent signals emitted by the one or more oligonucleotide ~~identifying or quantitating the hybridization of the target sequence under suitable hybridization conditions, wherein the presence, absence or amount of target sequence present in the sample is correlated with a change in detectable signal associated with at least one donor or acceptor moiety of the oligonucleotide; and~~

[[iv)] iii) ~~detecting, identifying or quantitating the presence of a tumor marker based upon the~~ fluorescent signals detected in step (ii) ~~presence, absence or amount of the hybridization of the oligonucleotide to the target sequence that is determined.~~

2. (Currently Amended) The method of claim 1, wherein the one or more tumor marker is ~~one or more of the markers~~ are selected from the group consisting of survivin, cyclin D1, Her2/neu, a mutant K-ras, chymotrypsinogen, basic ~~fibroblast~~ fibroblast growth factor, carcinoembryonic antigen, prostate[[,]] specific antigen, alpha-fetal protein, beta-2-microglobulin, bladder tumor antigen, chromogranin A, neuron-specific enolase, S-100, TA-90, tissue polypeptide antigen and human chorionic gonadotropin.

3. (Currently Amended) The method of claim 1, wherein the sample is taken from ~~at least one~~ a source selected from the group consisting of blood, urine, pancreatic juice, ascites, breast ductal lavage, nipple aspiration, needle biopsy or tissue.

4. (Original) The method of claim 3, wherein the tissue is a biopsy from the pancreas or breast.

5. (Original) The method of claim 3, wherein the tissue is a frozen section.

6. (Original) The method of claim 1, wherein the sample is taken from a breast ductal lavage.

7. (Original) The method of claim 1, wherein the sample is taken from pancreatic juice.

8. (Original) The method of claim 1, wherein the quantification of the presence of the tumor marker is accomplished by FACS-scan analysis.

9. (Currently Amended) The method of claim 1, wherein the ~~oligonucleotide is one~~
or more oligonucleotides are selected from the group consisting of SEQ ID NOS: 1, 2, 3, 4, 5, 6,
7, 8, 9, ~~[[10,]]~~ 11, 12 and 13.

10. (Currently Amended) The method of claim 1, wherein the ~~oligonucleotide targets~~
~~the one or more tumor marker~~ markers comprise survivin.

11. (Currently Amended) The method of claim 10, wherein the oligonucleotide that
hybridizes to the mRNA of survivin is ~~one or more~~ selected from the group consisting of SEQ ID
NOS: 1, 2 and 9.

12. (Currently Amended) The method of claim 1, wherein the ~~oligonucleotide targets~~
~~the one or more tumor marker~~ markers comprise cyclin ~~[[D 1]]~~ D1.

13. (Currently Amended) The method of claim 12, wherein the oligonucleotide that
hybridizes to the mRNA of cyclin D1 is ~~one or more~~ selected from the group consisting of SEQ
ID NOS: 3 and 4.

14. (Currently Amended) The method of claim 1, wherein the ~~oligonucleotide targets~~
~~the one or more tumor marker~~ markers comprise Her2/neu.

15. (Currently Amended) The method of claim 14, wherein the oligonucleotide that
hybridizes to the mRNA of Her2/neu is ~~one or more~~ selected from the group consisting of SEQ
ID NOS: 5 and 6.

16. (Currently Amended) The method of claim 1, wherein the ~~oligonucleotide~~
~~targets the one or more~~ tumor~~[[-]]~~ ~~marker~~ markers comprise a K-ras mutant gene.

17. (Currently Amended) The method of claim 16, wherein the oligonucleotide that
hybridizes to the mRNA of the K-ras mutant gene is ~~one or more~~ selected from the group
consisting of SEQ ID NOS: 7, 8, 11, 12 and 13.

18.- 49. (Canceled.)

50. (New) The method of claim 1, wherein the one or more tumor marker comprise
surviving and cyclin D1.

51. (New) The method of claim 50, wherein the oligonucleotide that hybridizes to the
mRNA of survivin is selected from the group consisting of SEQ ID NOS: 1, 2 and 9, and
wherein the oligonucleotide that hybridizes to the mRNA of cyclin D1 is selected from the group
consisting of SEQ ID NOS: 3 and 4.

52. (New) The method of claim 1, wherein the cells are breast ductal epithelial cells,
wherein said one or more tumor markers are survivin, cyclin D1 and Her-2/neu, and wherein said
one or more oligonucleotides consist of one oligonucleotide selected from the group consisting
of SEQ ID NOS: 1, 2 and 9, one oligonucleotide selected from the group consisting of SEQ ID
NOS: 3 and , and one oligonucleotide selected from the group consisting of SEQ ID NOS: 5 and
6.

53. (New) The method of claim 52, wherein said sample is ductal lavage.

54. (New) The method of claim 1, wherein said sample is peripheral blood or pancreatic juice, wherein said one or more tumor markers are mutant K-ras and survivin, and wherein said one or more oligonucleotides consist of one oligonucleotide selected from the group consisting of SEQ ID NOS: 7, 8, 11, 12 and 13, and one oligonucleotide selected from the group consisting of SEQ ID NOS: 1, 2 and 9.